AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for producing tools or blanks for tools of reduced dimensions for use in the assembly and interconnection of semiconductor chips, comprising:

a. providing at least one sinterable material in fine particulate form and at least one degradable organic thermoplastic material,

b. mixing an accurately determined volume of said sinterable particulate material or materials with an accurately determined volume of said thermoplastic material or materials to form a thermoplastic compound,

c. forming said thermoplastic compound into green semiconductor wire bonding tools or blanks for semiconductor wire bonding tools, and

d. extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions **respectively including at least one borehole having a diameter of about 10 micrometers or less**.

2. (Currently Amended) The method of claim 1, wherein the dense end products **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ below 10 micrometers.

3. (Previously Presented) The method of claim 1, wherein said sinterable particulate material or materials are selected from the class of metals, ceramics and mixtures of metals and ceramics.

4. (Previously Presented) The method of claim 1, wherein said sinterable material or materials include micron-sized or nanometer-sized particulates.

5. (Previously Presented) The method of claim 1, wherein said degradable organic thermoplastic material or materials are selected from the class of polyolefins, waxes, plasticizers, greases, oils, surfactants and mixtures of these.

6. (Previously Presented) The method of claim 1, wherein the tools include semiconductor wire bonding capillaries or blanks for semiconductor wire bonding capillaries.

7. (Previously Presented) The method of claim 1, wherein said tools or blanks of reduced dimensions include semiconductor wire bonding tools or blanks for semiconductor wire bonding tools.

8. (Canceled)

9. (Canceled)

10. (Currently Amended) The method of claim 1, wherein the dense end products **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of about 10 micrometers.

11. (Previously Presented) The method of claim 1, wherein the said tools include semiconductor wire bonding wedges or blanks for the semiconductor wire bonding wedges.

12. (Currently Amended) The method of claim 6, wherein the dense end products **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of about 10 micrometers.

13. (Currently Amended) The method of claim 1, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products that **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of about 10 micrometers.

14. (Currently Amended) The method of claim 1, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products that **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of below 10 micrometers.

15. (Currently Amended) The method of claim 1, wherein said sinterable material or materials include nanometer-sized particulates, and wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products that **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of below 10 micrometers.

16. (Currently Amended) The method of claim 1, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising tools for semiconductor wire bonding including semiconductor wire bonding capillaries that **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of about 10 micrometers or less.

17. (Currently Amended) The method of claim 1, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising blanks to make tools for semiconductor

wire bonding capillaries that **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of about 10 micrometers.

18. (Currently Amended) ~~**The method of claim 1,**~~

A method for producing tools or blanks for tools of reduced dimensions for use in the assembly and interconnection of semiconductor chips, comprising:

a. providing at least one sinterable material in fine particulate form and at least one degradable organic thermoplastic material,

b. mixing an accurately determined volume of said sinterable particulate material or materials with an accurately determined volume of said thermoplastic material or materials to form a thermoplastic compound,

c. forming said thermoplastic compound into green semiconductor wire bonding tools or blanks for semiconductor wire bonding tools, and

d. extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising tools for semiconductor wire bonding including semiconductor wire bonding wedges that **respectively** include ~~**boreholes**~~ **at least one borehole** having **a diameter** ~~**diameters**~~ of 13 micrometers.

19. (New) A method for producing tools or blanks for tools of reduced dimensions for use in the assembly and interconnection of semiconductor chips, comprising:

a. providing at least one sinterable material in fine particulate form and at least one degradable organic thermoplastic material,

b. mixing an accurately determined volume of said sinterable particulate material or materials with an accurately determined volume of said thermoplastic material or materials to form a thermoplastic compound,

c. forming said thermoplastic compound into green semiconductor wire bonding tools or blanks for semiconductor wire bonding tools, and

d. extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions;

wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising tools for semiconductor wire bonding that respectively include at least one borehole having final dimensions such that bonding wire for bonding semiconductor wires may pass during bonding, wherein the final dimensions of the at least one borehole are obtained during sintering.

20. (New) The method of claim 19, wherein the tools for semiconductor wire bonding include semiconductor wire bonding capillaries that respectively include at least one borehole having final dimensions such that bonding wire for bonding semiconductor wires may pass during bonding, wherein the final dimensions of the at least one borehole are obtained during sintering.